

## CLAIMS

1-31 (Cancelled).

32. A device for the measurement of lymphocyte activation, comprising,

means for incubating a sample containing a mixed population of cell types including a plurality of subsets of lymphocytes where each subset includes lymphocytes with characteristic determinants that distinguish one subset from another, with an inducing agent selected from the group consisting of mitogens and antigens;

means for separating a selected subset of lymphocytes from said sample;

means for lysing lymphocytes in said selected subset to release an activation-correlated intracellular component selected from the group consisting of ATP, NADP, and PCNA;

means for measuring said activation-correlated intracellular component; and

means for determining activation of lymphocytes for said selected subset of lymphocytes from said level of said activation-correlated intracellular component measured in said measuring step.